

Work Order ID 84837

\*84837\*

Page 1

Item ID: D206-642-341

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Item Name: Replacement Skidtube

Stop \*NS2\*

Start Date: 24/05/2012 Start Qty: 1.00

\*1\*

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00

\*1\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/05/20 Tooling:

Date:

Run Start \*NR1\*

QC:

Date: SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2650

F

100

0.00

\*100\*

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D206-642-341 CHG003

N/A

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84837

May-24-12 7:57:07 AM

**\*84837\***

Page 2

Item ID: D206-642-341

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**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 24/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00							
<b>*110*</b>									
Skidtubes	Memo	0.00							
Skidtubes	1-Deburr Fwd edge of tube								
	2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650								
	3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.								
	A/R Aluminum Rod <u>M12064</u>								
	4-Grind weld flush to cap on top surface only.								
	<del>5</del> -Cut aft end to length as per dwg D2650								
	<del>6</del> -Drill pilot holes using drill Jig DT8168A (A,& B ) and DT8025. Open to Ø0.312"								
	<del>7</del> -Drill holes for wearplates using DT 8028-5. Open to Ø 0.297".								
	<del>8</del> -Open Aft Cap Hole using #6 Drill Bit								
	<del>9</del> -Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail								
	<del>10</del> -Remove inner indexing ridge on aft end of skidtube as per Dwg D2650								
	<del>11</del> -Deburr and Blow out all chips from inside the tube								

CF 12-5-29

BE 12-05-29

CF 12-5-29

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Item ID: D206-642-341

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**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 24/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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115

QC5- Inspect part completeness to step on W/O

0.00

**\*115\***

QC

Memo

0.00

Quality Control

8/26/31

120

Chemical Conversion Coat per QSI005 4.1

0.00

**\*120\***

HandFinish

Memo

0.00

Hand Finishing

1 7/6 12-5-35

125

QC7-Inspect Chemical Conversion Coat

0.00

**\*125\***

QC

Memo

0.00

Quality Control

12-6-1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 24/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
<b>*130*</b>	Skidtubes								
Skidtubes									
Skidtubes									
	Memo	0.00							
	1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail (without cutting fluid)								
	2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid)								
	3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.								
	4-Bond D2654-5 web in place as per QSI 015Ensure holes line upAllow 12 Hrs. cure time before cutting								
	Start Date: <u>12-6-7</u> Time: <u>11:20</u>								
	Finish Date: <u>12-06-11</u> Time: <u>11:30</u>								
	A/RSikaflex-291 <u>m121409</u>								
	Sikaflex expiry date: <u>13-01-12</u>								
	4								
140	QC5- Inspect part completeness to step on W/O	0.00							
<b>*140*</b>									
QC									
Quality Control	Memo	0.00							

DE 12/06/07

CF 12-6-1

1 8 BE 06/11

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 24/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:

Run Start **\*NR1\***

QC: Date: SPC (Y/N): Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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150

0.00

**\*150\***

Skidtubes

Skidtubes

Memo

0.00

1-Prep per QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod  
A/RAluminum Rod *M120/64*

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Debur

4- Install nut plate as per dwg

170

QC10- Inspect visual per QSI004- ground welds

0.00

**\*170\***

QC

Memo

0.00

Quality Control

*5/24/12**12-6-13*

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 24/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

180

QC5- Inspect part completeness to step on W/O

0.00

**\*180\***

QC

Memo

0.00

Quality Control

190

Pressure Wash per QSI005 4.3

0.00

**\*190\***

HandFinish

Memo

0.00

Hand Finishing

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.

1 7/6 12-6-14

200

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

**\*200\***

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

7=30  
3200F  
8-00m-l  
1X 4 12/06/15

m121134

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**Work Order ID 84837****\*84837\***

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May-24-12 7:57:07 AM

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**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop **\*NS2\***

Start Date: 24/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

210

QC3- Inspect Part Finish

0.00

**\*210\***

QC

Memo

0.00

Quality Control

1x 1 11/06/12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Work Order ID 84837

**\*84837\***

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May-24-12 7:57:07 AM

Item ID: D206-642-341

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Replacement Skidtube

Stop

**\*NS2\***

Start Date: 24/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

220

0.00

**\*220\***

HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/RSikaflex-291 121409

Sikaflex expiry date: 13/07

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/RSikaflex-291 121409

Sikaflex expiry date: 13/07

6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4

Batch: 121613

1 8 22 12/06/19.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**Work Order ID 84837****\*84837\***

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May-24-12 7:57:07 AM

Item ID: D206-642-341

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**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Replacement Skidtube

Start Date: 24/05/2012 Start Qty: 1.00

**\*1\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00

**\*1\***

Customer:

Reference:

Approvals: Process Plan: Date:

Tooling: Date:

Run Start **\*NR1\***

QC: Date:

SPC (Y/N): Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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230

QC3- Inspect Part Finish

0.00

**\*230\***

QC

Memo

0.00

Quality Control

240

QC5- Inspect part completeness to step on W/O

0.00

**\*240\***

QC

Memo

0.00

Quality Control

250

Packaging

0.00

**\*250\***

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D206-642-341

Location:

PPP Rev:

PPP 84835

12/1/9 ①

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Revision ID:

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Item Name: Replacement Skidtube

Start Date: 24/05/2012 Start Qty: 1.00 **\*1\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 1.00 **\*1\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC21- Final Inspection - Work Order Release	0.00							
<b>*260*</b>									
QC	Memo	0.00							
Quality Control									

OK 12/7/12

R1207-11

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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# Picklist Print

May-24-12 7:57:11 AM

Page 1

Work Order ID: 84837

\*84837\*

Parent Item: D206-642-341

\*D206-642-341\*

Parent Item Name: Replacement Skidtube

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 1.00

Required Qty: 1.00

## Comments:

IPP Rev: H05.10.11 Added D3429-1 per CHG004KJ/CP/JLM  
IPP Rev: I 08-09-29 revF as per dwg DD verified by: EC Est Rev: J 09-03-02 as per DSI9440 rev.a DD verified by: EC IPP rev K 10.08.03 chg ms27039-1-08 for "C" type EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN960JD416 *AN960JD416* Washer	<del>NAS1149D0463J</del>	Purchased	No				Each	30.0000		1			
									**	1		12/06/12	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST351				30					
				116289				10					
				119097				20					
CCR264SS3-3 *CCR264SS3-3* Cherry Rivet		Purchased	No				Each	364.0000		2			
									**			12-6-12	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST331				364					
				113973				2					
				117849				81					
				119017				281					
CR3212-4-03 *CR3212-4-03* Cherry Rivet		Purchased	No				Each	1,278.000					
									**			12-6-12	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FP002				350					
				114859				350					
				ST331				928					
				110139				2					
				119017				926					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Work Order ID: 84837

\*84837\*

Parent Item: D206-642-341

\*D206-642-341\*

Parent Item Name: Replacement Skidtube

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2620

Manufactured No

Each

17.0000

1

\*D2620\*

\*\*

Skidtube, 206 Skidtube

CF 12-5-29

## Location

## Loc Qty

## Loc Code

LG

17

79543

2

79544

1

81365

1

82517

3

82518

10

D2647

Manufactured No

Each

79.0000

1

\*D2647\*

\*\*

Cap

BE 2-05-29

## Location

## Loc Qty

## Loc Code

LG002

79

75482

3

79563

76

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

May-24-12 7:57:11 AM

Page 3

Work Order ID: 84837

\*84837\*

Parent Item: D206-642-341

\*D206-642-341\*

Parent Item Name: Replacement Skidtube

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

Each

415.0000

19

\*D2649\*

\*\*

Cross Bolt Spacer

8-12/06/11

Location

Loc Qty

Loc Code

LG

272

77574

2

79502

8

79503

251

79564

4

79565

7

LG001

143

65317

1

68224

2

68507

11

71355

2

72704

2

72841

11

73390

8

73857

21

73858

53

73859

4

73860

4

78020

6

78583

2

79566

16

D2654-5

Manufactured No

Each

1.0000

1

\*D2654-5\*

\*\*

Web

CF 126-1

Location

Loc Qty

Loc Code

LG

1

82128

1

B85209

①

May-24-12 7:57:11 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Page 4

Work Order ID: 84837

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

\*84837\*

\*D206-642-341\*

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2680-041

Manufactured No

Each

87.0000

1

\*D2680-041\*

Nut Plate

\*\*

12-6-12

## Location

## Loc Qty

## Loc Code

ST013

87

78016

87

Each

1,733.000

\*\*

1

2 12/06/12

MS27039-1-08

Purchased

No

\*MS27039-1-08\*

Screw

## Location

## Loc Qty

## Loc Code

ST291

1733

117423

81

119075

1

120308 ✓

594

121011

57

121243

500

121708

500

Each

1,022.000

\*\*

54

54 12/06/12

MS27039C1-08

Purchased

No

\*MS27039C1-08\*

SCREW

## Location

## Loc Qty

## Loc Code

FP002

1

116022

1

ST292

1002

120308

354

121068

108

121162 ✓

540

ST293

19

116373

3

118077

14

119309

2

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May-24-12 7:57:11 AM

Page 5

Work Order ID: 84837

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

\*84837\*

\*D206-642-341\*

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 1.00

Required Qty: 1.00

ALS4-1032-130

Purchased

No

220

Each

3,051.000

54

54

\*AI S4-1032-130\*

Insert

\*\*

54

2P

12/06/19.

Location

Loc Qty

Loc Code

ST280

205

119084

116

120671

89

ST281

124

120807

36

120837

88

ST282

2722

121269 ✓

2722

AN960C10L

✗ NAS1149C0332 ✓ Purchased

No

220

Each

0.0000

54

54

\*AN960C10I \*

washer

\*\*

54

2P

12/06/19.

AN960JD10L

✗ NAS1149D0332J ✓ Purchased

No

220

Each

0.0000

2

2

\*AN960JD10I \*

Washer

\*\*

2

2P

12/06/19.

D2646

Manufactured

No

220

Each

32.0000

1

1

\*D2646\*

Aft Cap

\*\*

1

2P

12/06/19.

Location

Loc Qty

Loc Code

FP002

32

62678

5

68280

5

70945

1

71070

2

73294

1

73825

2

78018

4

79562

12

May-24-12 7:57:11 AM

Shop Packet Print

Page 5

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May-24-12 7:57:11 AM

Page 6

Work Order ID: 84837

\*84837\*

Parent Item: D206-642-341

\*D206-642-341\*

Parent Item Name: Replacement Skidtube

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 1.00

Required Qty: 1.00

D2651-1

Manufactured No

220

Each

439.0000

14

14

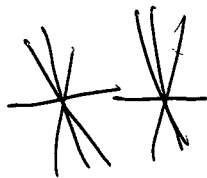
\*D2651-1\*

Plug

\*\*

14

12/06/19



## Location

## Loc Qty

## Loc Code

FP 200

FP001 425

57869 1

66445 10

69018 2

70827 2

70839 8

71037 8

77559 30

78584 18

79234 46

FP-A -186

77559 1

78124 5

81954 108

82573 ✓ 200

D2651-3

Manufactured No

220

Each

1,246.000

14

14

\*D2651-3\*

O-Ring

\*\*

14

12/06/19

## Location

## Loc Qty

## Loc Code

FP001 16

61962 12

73828 4

FP-A 1230

78126 ✓ 1230

May-24-12 7:57:11 AM

Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

May-24-12 7:57:11 AM

Page 7

Work Order ID: 84837

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

\*84837\*

\*D206-642-341\*

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3535-11

Manufactured No

220

Each

16.0000

1

1

\*D3535-11\*

Wearshoe

\*\*

1 DP 12/06/19

Location

Loc Qty

Loc Code

FP001

16

82153 ✓

16

D3535-23

Manufactured No

220

Each

18.0000

1

1

\*D3535-23\*

Wearshoe

\*\*

1 DP 12/06/19

Location

Loc Qty

Loc Code

FP001

18

81355

1

83375 ✓

17

D3535-35

Manufactured No

220

Each

30.0000

1

1

\*D3535-35\*

Wearshoe

\*\*

1 DP 12/06/19

Location

Loc Qty

Loc Code

FP001

30

67598

1

70815

1

78873

13

79849

1

82064

1

83638 ✓

13

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May-24-12 7:57:11 AM

Page 8

Work Order ID: 84837

\*84837\*

Parent Item: D206-642-341

\*D206-642-341\*

Parent Item Name: Replacement Skidtube

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3536-11

Manufactured No

220

Each

16.0000

1

1

\*D3536-11\*

Gasket

\*\*

1 20 12/06/19

## Location

## Loc Qty

## Loc Code

FP002

16

46649

1

46715

4

65574

1

80006

1

82152 ✓

9

D3536-23

Manufactured No

220

Each

12.0000

1

1

\*D3536-23\*

Gasket

\*\*

1 20 12/06/19

## Location

## Loc Qty

## Loc Code

FP002

12

74510

1

83377

11

D3536-35

Manufactured No

220

Each

17.0000

1

1

\*D3536-35\*

Gasket

\*\*

1 20 12/06/19

## Location

## Loc Qty

## Loc Code

FP002

17

81340 ✓

6

82065

11

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May-24-12 7:57:11 AM

Page 9

Work Order ID: 84837

**\*84837\***

Parent Item: D206-642-341

**\*D206-642-341\***

Parent Item Name: Replacement Skidtube

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 1.00

Required Qty: 1.00

D3537-1

Manufactured No

220

Each

79.0000

6

6

**\*D3537-1\***

Wearpad

\*\*

6 DP 12/06/19.

Location

Loc Qty

Loc Code

FG

8256 ✓

10

79833

10

FP002

69

69817

5

81360

38

81362

22

83254

1

83255

3

D3537-3

Manufactured No

220

Each

24.0000

1

1

**\*D3537-3\***

Wearpad

\*\*

1 DP 12/06/19.

Location

Loc Qty

Loc Code

FP002

24

78836

3

81363 ✓

21

MS27039-4-06

Purchased No

220

Each

131.0000

1

1

**\*MS27039-4-06\***

Screw

\*\*

1 DP 12/06/19.

Location

Loc Qty

Loc Code

ST292

131

119075 ✓

131

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 84837 MLJ  
12/05/28

RELEASED  
08-23-17

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3  
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:  
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS, SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	REMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW; INCCRP. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	<b>DART AEROSPACE USA, INC</b>	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



Technical drawing of a C8-6 channel section. The drawing shows the channel's profile with various dimensions and callouts. Key features include:

- Dimensions:**
  - Overall length: 96.5
  - Distance to bend tangent: 79.4
  - Distance to bend tangent (from reference): 17.1 REF
  - Distance from reference to first hole: 53.850
  - Distance between holes: 30.90
  - Distance from last hole to end: 13.50
  - Distance from end to detail A: 10.00
  - Distance from detail A to detail B: 19.00
  - Distance from detail B to end: 10.03
  - Distance from detail B to end (from reference): 2.00
  - Distance from reference to detail A: 17.1
  - Distance from reference to detail B: 79.4
  - Distance from reference to detail A (from end): 5.0
  - Distance from end to detail A: 13.50
  - Distance from detail A to detail B: 19.00
  - Distance from detail B to end: 10.03
  - Distance from detail B to end (from reference): 2.00
- Callouts:**
  - DETAIL A C8-6** (at the bend)
  - DETAIL B C8-6** (at the end)
  - D2654-1 WEB** (pointing to the web)
  - Ø0.375 17 PL PER SIDE** (pointing to the holes)
  - 5 HOLES @ 7.725 PITCH** (pointing to the holes)
  - NO CBORE THIS HOLE, ON EITHER SIDE** (pointing to a hole)
  - 2.00 TO WEB** (pointing to the end)
  - 7.00 FLAT** (pointing to the end)
  - 10.03** (pointing to the end)
  - 2.00** (pointing to the end)
  - 10.00** (pointing to the end)
  - 13.50** (pointing to the end)
  - 19.00** (pointing to the end)
  - 79.4** (pointing to the bend tangent)
  - 17.1 REF** (pointing to the reference line)
  - 5.0** (pointing to the end)
  - 53.850** (pointing to the distance from reference to first hole)
  - 30.90** (pointing to the distance between holes)
  - 13.50** (pointing to the distance from last hole to end)
  - 10.00** (pointing to the distance from end to detail A)
  - 10.03** (pointing to the distance from detail B to end)
  - 2.00** (pointing to the distance from detail B to end from reference)
  - 7.00 FLAT** (pointing to the end)
  - 19.00** (pointing to the distance from detail B to end)
  - 79.4** (pointing to the distance from reference to detail B)
  - 17.1** (pointing to the distance from reference to detail A)
  - 5.0** (pointing to the distance from reference to detail A from end)
  - 13.50** (pointing to the distance from end to detail A)

**DETAIL F** A3-6

1.5

1.5

FINISH HOLES PER DETAIL D C2-6

ANTI-SKID PAINT 3 PL

1.5

1.5

**DETAIL E** A7-6

P

P

P

P

P

P


P

9.5

10.0

**FIGURE 1 ASSEMBLY/FINISHING DETAIL**

RELEASED  
880922/11

DESIGN	DS	<b>DART AEROSPACE USA, INC</b>	
DRAWN	AJS	<b>PORT HADLOCK, WA</b>	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 2 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE USA, INC. IT IS TO BE KEPT IN THE COMPANY'S FILES FOR THE COMPANY'S USE ONLY. IT IS NOT TO BE REPRODUCED OR COPIED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

# Dart Aerospace Ltd

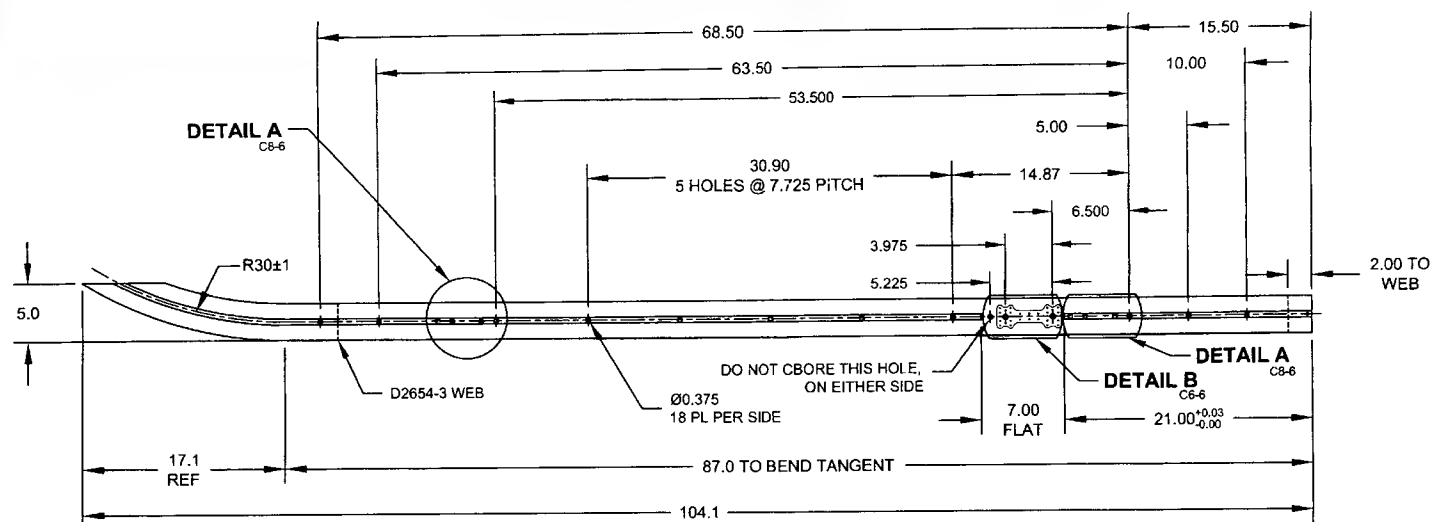
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng Prod Mgr	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

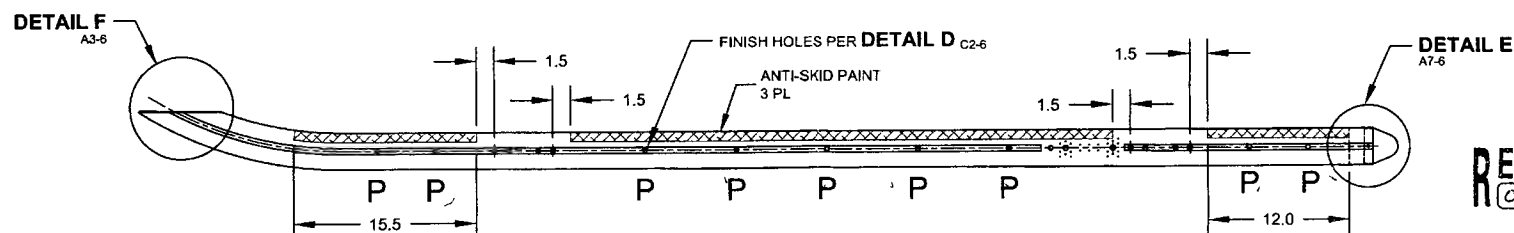
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



### D2650-3 BENDING/DRILLING DETAIL



### D2650-3 ASSEMBLY/FINISHING DETAIL

RELEASE  
05 07 22 114

DESIGN	DS	<b>DART AEROSPACE USA, INC</b>	
DRAWN	AJS	<b>PORT HADLOCK, WA</b>	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 3 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRINTED AND IS SUPPLIED UNDER THE EXTENDED CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR CONTAINED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

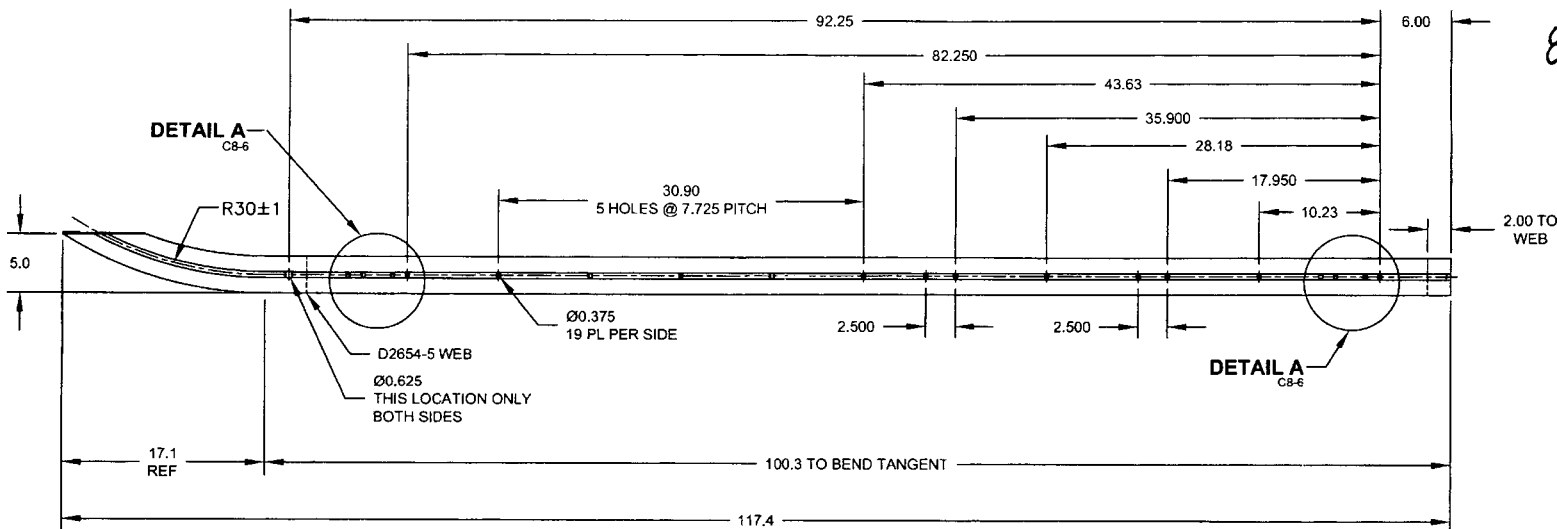
W/O:		WORK ORDER CHANGES				
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng Prod Mgr

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

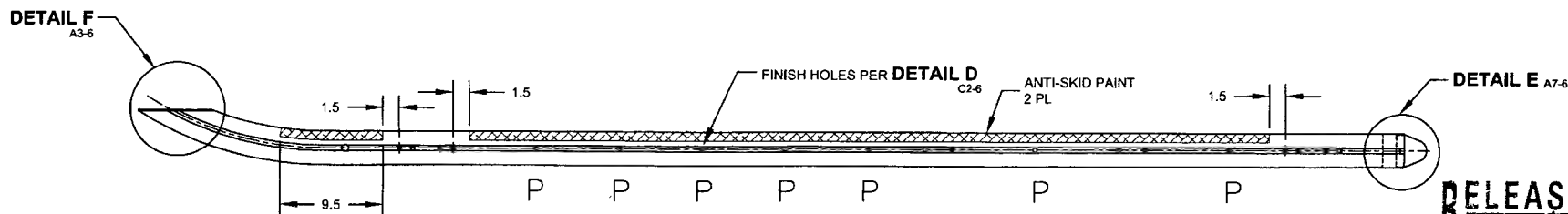
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



**D2650-5 BENDING/DRILLING DETAIL**



**D2650-5 ASSEMBLY/FINISHING DETAIL**

DESIGN	DS	<b>DART AEROSPACE USA, INC</b>	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
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**RELEASED**  
08-09-22-117

**Dart Aerospace Ltd**

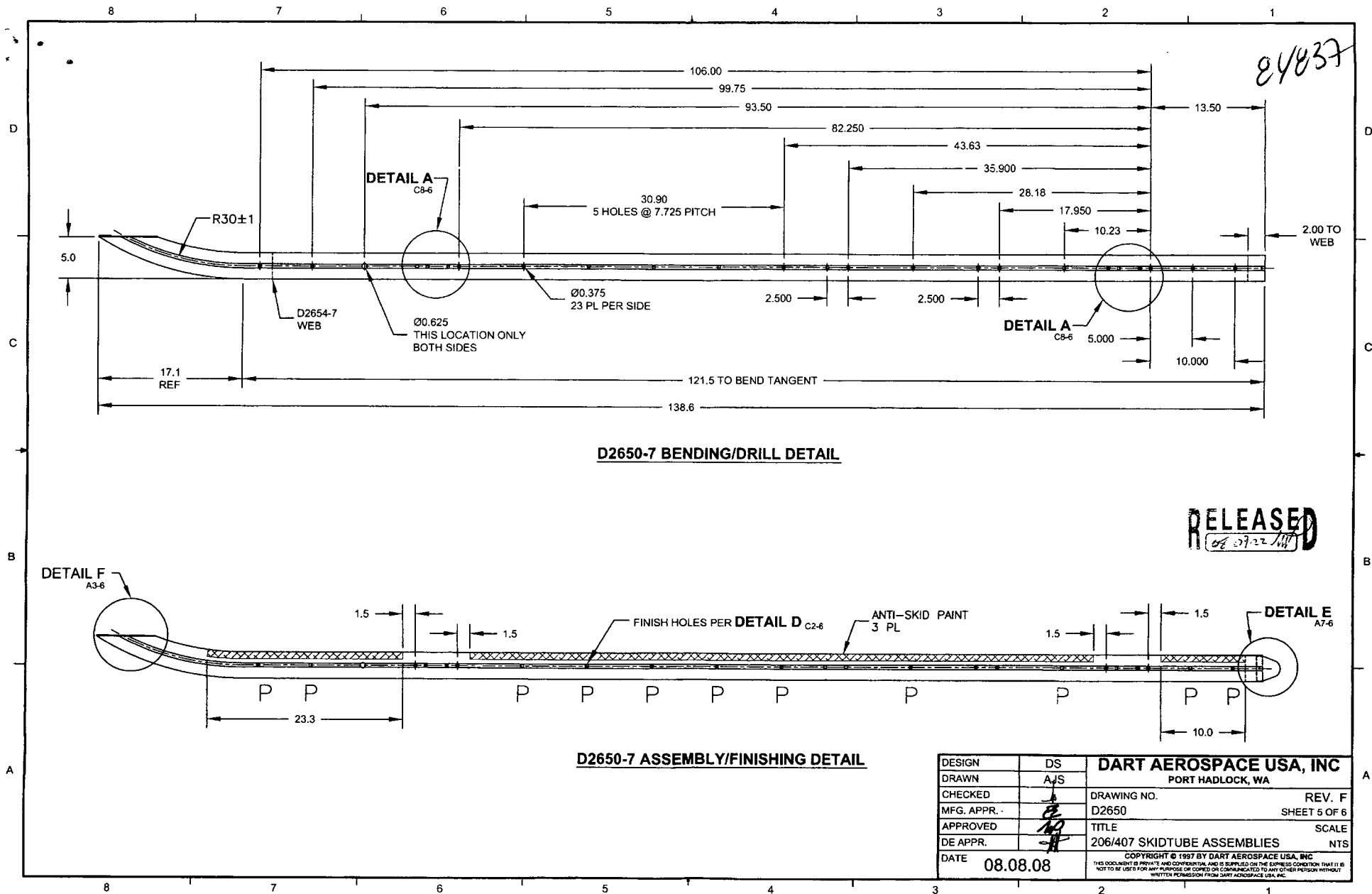
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

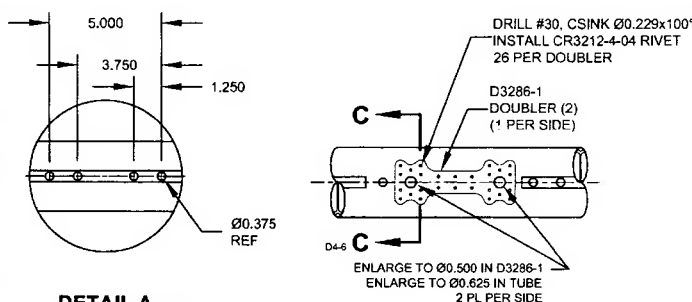
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

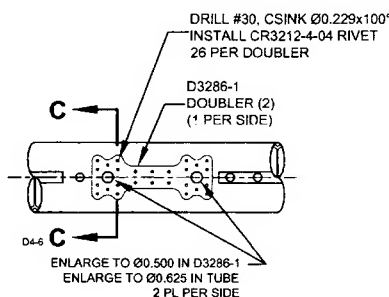
**NOTE:** Date & initial all entries



04837



**DETAIL A** C2-2  
SCALE 2X D7-2  
C2-3  
D7-3  
C2-4  
D7-4  
C2-5  
D6-5

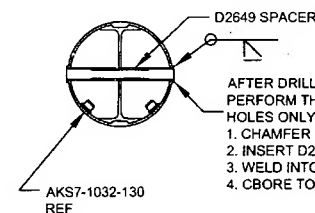
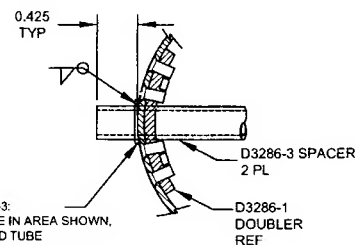


**DETAIL B** C3-2  
SCALE 2X C3-3

- TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH ROUND TUBE
  2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
  3. ENLARGE HOLES IN D3286-1 TO Ø0.500
  4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.030x45°
  5. RIVET D3286-1 TO TUBE
  6. INSERT D3286-3 SPACER
  7. WELD IN PLACE.

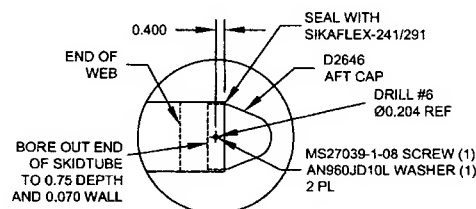


**SECTION C-C** C7-6  
SCALE NONE



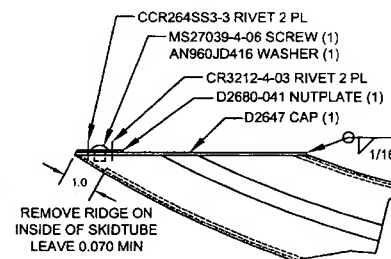
**DETAIL D** B4-2  
FOR Ø0.375 HOLES ONLY B4-3  
SCALE 3X B4-4  
B4-5

- AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:
1. CHAMFER HOLE 0.030 X 45°
  2. INSERT D2649 SPACER
  3. WELD INTO PLACE AND GRIND FLUSH
  4. CBORE TO Ø0.313 X 0.75 DP



**DETAIL E** B2-2  
SCALE 2X B2-3  
B1-4  
B1-5

ORIENTATION OF D2680-041



**DETAIL F** B8-2  
SCALE NONE B8-3  
B8-4  
B8-5

**DETAIL F NOTES:**

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

**RELEASED**

DESIGN	DS	<b>DART AEROSPACE USA, INC</b>	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 6 OF 6
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# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section.C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

NO. 297

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Barday Elliott  
Job #: 80951  
Part #: A206-642-151  
Description: Skid tube  
Welding Process: Tig ☒ Mig ☐  
Base material: Alum  
Current: AC ☒ DC ☐

TEST REQUIREMENTS AND RESULTS

Visual:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Incomplete Penetration:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Incomplete Fusion:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Cracks:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Overlap (cold lap)	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Undercut:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Pin holes:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Porosity (surface):	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Coloration:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>
Burn through:	pass <input checked="" type="checkbox"/>	fail <input type="checkbox"/>

Qualifier David David Date of Test Coupon 12.06.13  
Welder Barday Elliott Date of Test Coupon 12.06.13

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

